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ABSTRACT

This report provides evaluative information regarding the effectiveness of Project Aprendizaje, a New York City program that served 269 Spanish-speaking students of limited English proficiency (LEP). The project promoted parent and community involvement by sponsoring cultural events, such as a large Latin American festival. Students developed their writing skills and self-esteem by contributing articles in English and Spanish to a biannual newsletter. Participating students received instruction in English as a second language (ESL), native language arts (NLA), and the content-area subjects of mathematics, science, and social studies. Evaluation data show that Project Aprendizaje met its objectives for ESL, NLA, business education, attendance, suspension rate, dropout prevention, guidance, extracurricular activities, newsletter production, and parental involvement. It also met its content-area objectives except for science in the fall, and it met two of three staff-development objectives. No recommendations are presented. Appendices contain a list of instructional materials and class schedules. (GLR)

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OER Report

Project Aprendizaje
Transitional Bilingual Education Grant T003A80043
FINAL EVALUATION REPORT
1992-93

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Project Aprendizaje
Transitional Bilingual Education Grant T003A80043
FINAL EVALUATION REPORT
1992-93

Ms. Elisa Muñoz-Feder, Director
Project Aprendizaje
Seward Park High School
350 Grand Street
New York, NY 10002
(212) 475-2667

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EXECUTIVE SUMMARY

Project Aprendizaje was an Elementary and Secondary Education Act (E.S.E.A.) Title VII-funded project in its fifth and final year of operation at Seward Park High School in Manhattan. In the year under review, Project Aprendizaje served a total of 269 Spanish-speaking students of limited English proficiency (LEP). This represented a decrease of 30 students from the previous year but was still greater than the number of students which the project had proposed to serve. Participating students received instruction in English as a second language (E.S.L.), native language arts (N.L.A.), and the content area subjects of mathematics, science, and social studies.

Project Aprendizaje promoted parent and community involvement by sponsoring cultural events such as a large Latin American festival. Students developed their writing skills and self-esteem by contributing articles in English and Spanish to a biannual newsletter.

Project Aprendizaje met its objectives for E.S.L., N.L.A., business education (although one of the four objectives in this area was dropped when the school cancelled the course in occupational education), attendance, suspension rate, dropout prevention, guidance, extracurricular activities, newsletters, and parental involvement. It met its content area objective except for science in the fall, and it met two of three staff development objectives—the educational assistants did not complete college courses as proposed.

Since this was its final year, no recommendations for project improvement are offered.

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Additional copies of this report are available from:

Dr. Tomi Deutsch Berney
Office of Educational Research
Board of Education of the City of New York
110 Livingston Street, Room 732
Brooklyn, NY 11201
(718) 935-3790 FAX (718) 935-5490

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I. INTRODUCTION

This report documents the Office of Research, Evaluation, and Assessment's (OREA's) evaluation of the Elementary and Secondary Education Act (E.S.E.A.) Title VII project, Project Aprendizaje.

PROJECT CONTEXT

The program operated at Seward Park High School in the culturally diverse Lower East Side of Manhattan. The area has always been a melting pot of immigrants, in the past from Europe and today mostly from Latin America or Asia. Project staff described the local population as blue-collar, with widespread unemployment.

Seward Park High School drew between 85 and 90 percent of its students from the surrounding community and reflected its demographics. Of the 3,202 students who registered in the year under review, 46 percent were Latino, 38 percent were Asian American, 14 percent were African-American, and 2 percent were European-American. Forty-four percent (1,393) of these students were of limited English proficiency (LEP). Forty-seven percent of the students were eligible for the federally-funded free-lunch program, an index of poverty.

Seward Park High School is housed in a five-story building that was constructed in 1930. Some ninth- and tenth-grade classes were held in an annex several blocks away. Classrooms and hallways at the main building were observed to be clean, well-lit, and in reasonably good repair. Stairways were narrow and seemed tumultuous between periods. Student work was displayed on several bulletin

boards around the school. The project office had areas for studying or tutoring during students' free periods.

STUDENT CHARACTERISTICS

Project Aprendizaje served Spanish-speaking LEP students in ninth through twelfth grade. Scores at or below the 40th percentile on the Language Assessment Battery (LAB) determined LEP status. In selecting students, the project also considered low scores on in-house English as a second language (E.S.L.) placement tests.

The project served a total of 269 students: 73 ninth grade, 83 tenth grade, 61 eleventh grade, and 52 twelfth grade. Male students numbered 131 (48.7 percent) and female 138 (51.3 percent). The majority of participants (72.5 percent) were born in the Dominican Republic. For students' countries of origin see Table 1. Most (98.9 percent) of the participants came from low-income families and were eligible for the free-lunch program.

The family circumstances of Project Aprendizaje students often had an adverse impact on their education. Project staff explained that it was typical for parents to leave their children with relatives in the Dominican Republic while they sought to establish themselves in the United States. Then—in many cases, after several years had passed—their children joined them in New York. This pattern of long separation with its resultant fears of abandonment, added to the generalized turmoil of adolescence and adversely affected learning. A further source of stress in many cases was the need for students to work after school in order to help support the

family. This left little time for homework, and employers (mainly supermarkets) frequently demanded overtime when students could least afford to give it.

TABLE 1

Students' Countries of Origin

Country	Number of Students
Dominican Republic	195
Puerto Rico	23
United States	11
Mexico	10
Colombia	8
Ecuador	8
El Salvador	4
Venezuela	4
Other	6
Total	269

Needs Assessment

Before instituting the project, Seward Park High School assessed the needs of the targeted students and their families as well as of the educational staff who were to serve them. The original grant proposal stressed the cultural dislocation and economic disadvantage of undereducated LEP students arriving in New York City. The project emphasized their need to learn English as rapidly as possible, to be

prepared on graduation to enter the job market or higher education, and to find a supportive atmosphere through the presence and interventions of project staff.

In each year of the project's operation, parents registering students were asked to complete a questionnaire which yielded information about their family structure and educational background. This provided staff with current information on the circumstances and needs of the families served by the project.

PROJECT OBJECTIVES

Student Objectives

- As a result of participating in the program, 70 percent of E.S.L. students at all levels will achieve a passing grade of 65 percent or more on teacher-made final examinations.
- As a result of participating in the program, students will show statistically significant gains on El Examen de Lectura en Español (ELE).
- As a result of participating in the program, 75 percent of students will achieve a passing grade of at least 75 percent in Advanced Placement Spanish on teacher-made final examinations and the Advanced Placement Examination for college credits.
- As a result of participating in the program, 70 percent of the students will achieve a passing grade of 65 percent or higher on teacher-made or schoolwide examinations in mathematics.
- As a result of participating in the program, 70 percent of the students will achieve a passing grade of 65 percent or higher on teacher-made or schoolwide examinations in science.
- As a result of participating in the program, 70 percent of the LEP students will achieve a passing grade of at least 65 percent on teacher-made or schoolwide examinations in social studies.
- As a result of participating in the program, 70 percent of the students will achieve a passing grade of 70 percent or higher on teacher-made and/or schoolwide examinations in Keyboarding I, II.

- As a result of participating in the program, 70 percent of the students will achieve a passing grade of 70 percent or higher in Bilingual Occupational Education I, II.

- As a result of participating in the program, 70 percent of the students will achieve a passing grade of 70 percent or higher in Computer & Business Technology on teacher-made final examinations.

- As a result of participating in the program, 75 percent of the students will receive a passing grade of 75 in Jewelry on teacher-made final examinations.

- The project will organize and help conduct at least three extracurricular activities in which 50 or more project students participate.

- Two newsletters will be published describing the aims, goals, and implementation procedures of the program.

- Program students will have a dropout rate no greater than that of non-program students.

- Students in the program will have a suspension rate no greater than that of the mainstream students.

- By June 30, 1993, students in the program will have a rate of attendance at least equal to that of the mainstream students.

- All graduating students will meet with the career counselor for advice at least four times during the school year or as many times as necessary to help the student.

- Students with special needs (e.g., academic, linguistic, psychological, economic) will meet the guidance counselor at least once monthly.

Staff Development Objectives

- By June 30, 1993, 100 percent of Project Aprendizaje personnel will have participated in staff development activities, in-service training workshops, and departmental meetings offered by the Project Director.

- By June 30, 1993, all the educational assistants will have completed a minimum of nine credits towards a bachelor's degree or training in a field relating to bilingual education.

- By June 30, 1993, 100 percent of the professional staff will have attended a regional or national conference, meetings, seminars, colloquiums, and workshops in the field of bilingual education.

Parental Involvement Objectives

- The Bilingual Parent Advisory Council (BPAC) will have at least four meetings during the school year with an attendance of at least 50 percent of the BPAC members.
- There will be an increase in the number of parents attending parent-teacher day/night conferences.
- Students' parents will be contacted by telephone, mail, newsletters, or home visits by the family assistant to inform them of their children's program activities.

PROJECT IMPLEMENTATION

During the 1992-93 school year, Project Aprendizaje provided instructional and support services to 269 Spanish-speaking students. The project's main goals were to help students attain English proficiency and progress academically, to prepare them for the job market or higher education, and to provide them with a supportive environment.

The language of instruction varied with the subject area and level, generally progressing from mostly Spanish in the elementary courses to all English in the advanced courses. For example, first-year biology was taught about half in English and half in Spanish. (Other science courses, such as chemistry and physics, in which only a few project students were enrolled, were offered only in the mainstream.) In mathematics, the basic courses were taught almost entirely in Spanish. Computer Literacy was taught about 25 percent of the time in English. For

the pre-sequential mathematics courses, the language mix shifted to 50-50 and in sequential mathematics to 80 percent English. More advanced courses were in the mainstream. Social studies followed a similar pattern: global studies was taught entirely in Spanish in the first year and about 25 percent in English the second year. United States history classes used the two languages about equally in the first semester; but in the second semester, the use of English was increased to 75 percent. After this, social studies courses were in the mainstream.

Although Spanish-speaking paraprofessionals assisted with several of the business education courses, none of the teachers in this subject area spoke Spanish. Project staff expressed the need for at least one bilingual business teacher.

Project Aprendizaje offered students career and personal counseling and a variety of cultural and extracurricular activities. Project staff and parents each had regular meetings.

Materials, Methods, and Techniques

Project Aprendizaje offered E.S.L. at literacy, beginning, intermediate, advanced, and transitional levels, and native language arts (N.L.A.) at literacy, beginning, intermediate, advanced, and advanced placement levels. In content area subjects, the project aimed for a progressive increase in the use of English as described above.

Instructional techniques varied with the individual teachers' styles and the perceived needs of the class. The project reported that E.S.L. teachers drew upon methods developed by James J. Asher (*Total Physical Response*) and Caleb

Gattegno (*The Silent Way*), among others. N.L.A. instruction was reported to emphasize the study of modern Latin American literature and role-playing.

Biology courses provided two laboratory periods per week; in class, teachers led exploratory dialogues. The mathematics program made use of the school's computer lab for its computer literacy course, which covered elementary programming in BASIC and sought to strengthen computational skills by means of the PLATO interactive software package. Social studies teachers reported using newspapers and periodicals and frequent essay-writing assignments, including an end-of-term monograph. Sensitive to the value of intercultural understanding, the social studies department contracted with the "Asia through the Arts" program (funded and coordinated by the American Museum of Natural History) to provide the Latino project participants with experiences in Chinese cultural activities centering on music, dance, and calligraphy.

For a list of instructional materials used in the project, please see Appendix A.

Capacity Building

This was the project's final year. Many project services will be continued with tax-levy funds.

Staff Qualifications

Title VII staff. Of the four paraprofessionals supported by Title VII funds (three wholly, one partly), three assisted in classrooms and helped with translation and tutoring. The fourth served as project secretary in addition to providing tutoring services and maintaining communications with parents. A curriculum resource

teacher, partly funded by Title VII, helped prepare contact letters and agendas for the parent meetings and, in the spring, worked on the development of a bilingual curriculum for the human development courses. All Title VII staff members were bilingual in Spanish and English. One of the paraprofessionals held an associate's degree; the others held high school diplomas. The resource teacher had a master's degree and was certified to teach science bilingually.

Other staff. The project director was funded by tax levy and was responsible for supervising and coordinating activities and providing evaluation data. The director had worked in bilingual education programs at Seward Park High School for nine years. Tax-levy funds paid the salaries of the 52 classroom teachers who provided instructional services to project students, a bilingual guidance counselor, two social workers, one bilingual psychologist, and one professional counselor. For degrees, certifications, and language proficiency (teaching or communicative*), please see Table 2. All teachers held licenses or appropriate professional certification in the areas in which they served.

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*Teaching proficiency (TP) is defined as the ability to use LEP students' native language in teaching language arts or other academic subjects. Communicative Proficiency (CP) is defined as a non-native speaker's basic ability to communicate and interact with students in their native language.

TABLE 2

Qualifications of Non-Title VII-Funded Staff

Position Title	Degree(s)	Certificates/ Licenses	Language Competencies (Spanish)
1 Proj. Director	MA	Spanish	TP
52 Teachers	43 MA/MS, 2 MBA, 6 BA 1 BBA	24 E.S.L., 5 Spanish, 11 Math, 4 History, 6 Business, 1 Science, 1 Bil. Science	19 TP
2 Soc. Workers	2 MA	2 School Social Worker licenses	2 TP
1 Bil. Psychologist	MA	Bil. School Psychologist	TP
1 Bil. Guidance Counselor	MA	Bil. Guidance	TP
1 Counselor	MA	Professional license	None

Staff development. The project did not offer staff development. All Title VII staff, however, attended monthly meetings of the Foreign Language/E.S.L. department. Some staff members attended outside conferences and workshops, as well as school-organized presentations on such topics as discipline and AIDS education. Two of the paraprofessionals completed college credits during the year under review.

Instructional Time Spent on Particular Tasks

See Appendix B for the daily class schedules of some representative project students.

Length of Time Participants Received Instruction

Students had a mean of 7.9 years (standard deviation [s.d.]=2.3) of education in a non-English-speaking school system and 3.2 years (s.d.=2.3) of education in the United States. The median time students participated in Project Aprendizaje was 20 months.

Activities to Improve Pre-Referral Evaluation Procedures for Exceptional Children

Teachers referred those students thought to be in need of special education services to the School-Based Support Team (S.B.S.T.) for evaluation. Three members of this team were bilingual in Spanish: a social worker, a psychologist, and a counselor.

Gifted and talented students were identified by teacher judgment and course grades.

Instructional Services for Students with Special Needs

When appropriate, the project referred students for medical evaluation of hearing and vision problems. The project offered tutoring throughout the school day to students having difficulty in classes.

Gifted and talented students were given activities which were enriching and would allow them to progress at their own pace. Students with writing skills worked on the project newsletter, *La Voz Latina*, in various capacities.

PARENT AND COMMUNITY INVOLVEMENT ACTIVITIES

The project sponsored a Latin American festival, which was heavily attended by parents and members of the community. Students as well as visiting artists

performed songs and dances. Dignitaries in attendance included the consuls of Costa Rica and the Dominican Republic and an Argentinian diplomat assigned to the United Nations.

CURRICULUM DEVELOPMENT ACTIVITIES

In consultation with project staff, one of the school's bilingual mathematics teachers translated the bulk of the textbook *Integrated Mathematics I and II* for use with Spanish-speaking students.

II. EVALUATION METHODOLOGY

EVALUATION DESIGN

Project Group's Educational Progress as Compared to That of an Appropriate Non-Project Group

OREA used a gap reduction design to evaluate the effect of language instruction on project students' performance on standardized tests. Because of the difficulty in finding a valid comparison group, OREA used instead the groups on which the tests were normed. Test scores are reported in Normal Curve Equivalents (N.C.E.s), which are normalized standard scores with a mean of 50 and a standard deviation of 21.1. It is assumed that the norm group has a zero gain in N.C.E.s in the absence of supplementary instruction and that participating students' gains are attributable to project services.

OREA used final course grades in E.S.L., mathematics, science, social studies, and business to measure growth in E.S.L. and content area subjects, as specified by the relevant objectives.

To assess the staff development objectives, the project director provided information to OREA on staff development activities and course completion by paraprofessionals.

To assess the parental involvement objectives, the project furnished OREA with photocopies of the sign-in sheets for meetings of the parent advisory council and attendance figures for the parent-teacher conferences.

Applicability of Conclusions to All Persons Served by Project

Data were collected from all participating students for whom there were pre- and posttest scores. (There were no pretest data on students who entered the program late.) Instruments used to measure educational progress were appropriate for the students involved. The LAB and El Examen de Lectura en Español (ELE) are used throughout New York City to assess the growth of English and Spanish skills in populations similar to those served by Project Aprendizaje.

INSTRUMENTS OF MEASUREMENT

OREA compared pre- and posttest scores on the LAB to document growth in English proficiency (while evaluating the E.S.L. objective with course grades as specified) and used the ELE to assess the N.L.A. objective. The content area objectives in mathematics, science, and social studies as well as those for business education were assessed through course grades, as specified.

All students were tested at the appropriate grade level. The language of the LAB and ELE was determined by the test itself.

According to the publishers' test manuals, all standardized tests used to gauge project students' progress are valid and reliable. Evidence supporting both content and construct validity is available for the LAB. Content validity is confirmed by an item-objective match and includes grade-by-grade item difficulties, correlations between subtests, and the relationship between the performance of students who are native speakers of English and students who are LEP. To support reliability, the Kuder-Richardson Formula 20 (KR20) coefficients and standard errors of

measurement (SEM) are reported by grade and by form for each subtest and total test. Grade reliability coefficients, based on the performance of LEP students on the English version, ranged from .88 to .96 for individual subtests and from .95 to .98 for the total test.

The ELE was prepared by New York City educators who were native speakers of Spanish and represented several Latino linguistic and cultural groups. The ELE was administered in two forms to all New York City students who were receiving language arts instruction in Spanish. For Form 1, the grade reliability coefficients ranged from .94 to .96. Comparable data for Form 2 will be generated as soon as possible after its administration in the spring of 1993. Items on the test were grade-specific. Construct validity is evidenced by grade-to-grade decreases in item difficulty within level. This characteristic reflects the acquisition of increased amounts of the underlying construct (reading proficiency) as students progress through the grades.

DATA COLLECTION AND ANALYSIS

To gather qualitative data, an OREA evaluation consultant visited Seward Park High School twice. On each visit, he observed two classes and interviewed the project director. OREA collected the data and prepared the final evaluation report in accordance with the New York State E.S.E.A. Title VII Bilingual Education Final Evaluation Report format.

Proper administration of instruments. Qualified personnel received training in testing procedures and administered the tests. Testers followed guidelines in the

administration manuals accompanying standardized tests. Time limits for subtests were adhered to; directions were given exactly as presented in the manuals.

Testing at 12-month intervals. The ELE was not administered at the appropriate 12-month interval. A failure of communication in the previous spring had resulted in the ELE's not being administered at Seward Park High School at the appointed time. This was not the responsibility of project staff. The pretest was administered in September 1992, and the posttest in April 1993.

Data Analysis

Accurate scoring and transcription of results. Scoring, score conversions, and data processing were accomplished electronically by the Scan Center of the Board of Education of the City of New York. Data provided by the Scan Center were analyzed in the Bilingual, Multicultural, and Early Childhood Evaluation Unit of OREA. Data collectors, processors, and analysts were unbiased and had no vested interest in the success of the project.

Use of analyses and reporting procedures appropriate for obtained data. To assess the significance of students' achievement in English and Spanish, OREA computed a correlated *t*-test on the LAB and ELE N.C.E. scores. The *t*-test determined whether the difference between the pre- and posttest scores was significantly greater than would be expected from chance variation alone.

The only possible threat to the validity of any of the above instruments might be that LAB norms were based on the performance of English proficient (EP) rather

than LEP students. Since OREA was examining gains, however, this threat was inconsequential—the choice of norming groups should not affect the existence of gains.

III. FINDINGS

PARTICIPANTS' EDUCATIONAL PROGRESS

Project Aprendizaje carried out all instructional activities specified in its original design.

Participants' Progress in English

Throughout the school year, students had ample opportunity to develop their English language skills. In the year under review, 32 project participants took mainstream English communication arts courses.

An OREA consultant observed two E.S.L. classes at Seward Park High School. Both classes served a mixed group of project and non-project students, most of whom were Asian-American. The level 2 (beginning) class of 23 students focused on syntactic structures. The teacher called on students to write sentences using these structures, both on paper and on the chalkboard. He occasionally mimed activities and elicited choral answers to reinforce basic patterns. The teacher used a traditional grammar-based approach, using terms such as "subject," "verb," "object," and "intransitive." Students had on their desks the text and workbook of *English for a Changing World* (Part 1B) but did not appear to use them during the class. Most students were attentive and participated actively, frequently calling out answers; a small number of students appeared withdrawn.

The level 3 (intermediate) class had 20 students and enjoyed the services of a paraprofessional. The teacher assigned two exercises from the workbook, *Turning Points 3*, that focused on phrases of time and sequence. She engaged individuals

rather than the whole class, but students with whom she was not working appeared to be busy studying their texts or writing in their workbooks. The paraprofessional worked independently of the teacher, coaching individual students. He spoke to one student in Spanish; otherwise, only English was spoken in the class.

The evaluation objective for English as a second language was:

- As a result of participating in the program, 70 percent of E.S.L. students at all levels will achieve a passing grade of 65 percent or more on teacher-made final examinations.

Final E.S.L. course grades were reported for 177 students in the fall and 159 in the spring. Although the percent passing at two grade levels (grade nine in the fall and grade twelve in the spring) did not reach the 70 percent target rate, the project met its objective overall. (See Table 3.)

The project met its objective for English as a Second Language, as it had done the previous year.

TABLE 3
E.S.L. Passing Rates, by Grade Level

Grade	Fall		Spring	
	Number Enrolled	Percent Passing	Number Enrolled	Percent Passing
9	47	66.0	50	88.0
10	69	71.0	72	77.8
11	48	77.1	34	79.4
12	13	92.3	3	66.7
Total	177	72.9	159	81.1

- In both semesters, at least two-thirds of the students at all grade levels passed E.S.L.

To document students' gains in English language proficiency as measured by a standard instrument, OREA also gathered and analyzed their pre- and posttest scores on the LAB. Findings are summarized in Table 4.

Participants' Progress in Native Language Arts

At the beginning of the academic year, three percent of the participants lacked basic skills in Spanish and were enrolled in literacy classes. A total of 159 students received instruction in native language arts in the fall and 141 in the spring. These numbers were relatively low, because students were not required to take Spanish beyond the level that would satisfy the school's foreign language requirement.

The first evaluation objective for N.L.A. was:

- As a result of participating in the program, students will show statistically significant gains on El Examen de Lectura en Español (ELE).

Paired pre- and posttest scores on the ELE were available for 85 students. With an average pretest of 46.4 N.C.E.s (s.d.=23.6) and an average posttest of 50.9 N.C.E.s (s.d.=22.1), their mean gain was 4.5 N.C.E.s (s.d.=19.1) and was statistically significant. (t=2.18, p< 05)

The project met its N.L.A. objective for gains on the ELE. This objective could not be evaluated in the previous year.

TABLE 4

Pretest/Posttest Differences on the
Language Assessment Battery, by Grade Level

(Scores are in N.C.E.s)

Grade	Total number of project students	Number of students for whom data were available	Pretest		Posttest		Difference		*t* value
			Mean	S.D.	Mean	S.D.	Mean	S.D.	
9	73	40	4.9	8.4	7.8	12.4	2.9	7.7	2.41*
10	83	68	4.8	7.9	8.1	10.0	3.3	6.4	4.26*
11	61	44	14.5	10.5	22.2	12.1	7.7	10.3	4.96*
12	52	27	18.2	12.2	27.1	14.5	8.9	9.1	5.07*
Total	269	179	9.3	10.9	14.4	14.2	5.1	8.5	8.10*

*$p < .05$

- At every grade level and overall, project students achieved a significant average increase on the LAB.

The second evaluation objective for N.L.A. was:

- As a result of participating in the program, 75 percent of students will achieve a passing grade of at least 75 percent in Advanced Placement Spanish on teacher-made final examinations and the Advanced Placement Examination for college credits.

Of the 15 students who took the advanced placement examination in Spanish, 13 (87 percent) scored 4 or 5 on a five-point scale.

The project met the N.L.A. advanced placement objective, as in the previous year.

LEP Participants' Academic Achievement

Content area instruction was mainly in Spanish for the lower-level courses; the use of English increased as students progressed to more advanced courses.

An OREA consultant observed the first period of a two-period bilingual biology 2 class of 22 students, most of whom were in the tenth or eleventh grade. A classroom set of *Biología*, by P. Alexander et al., was available at the back of the room but was not used in the lesson. The teacher lectured about the insights which modern genetics provides to some of the questions which Darwin could not answer. She covered De Vries's model of mutation, the Hardy-Weinberg law, and factors that influence the emergence of new species. Students copied the lengthy outlines which the teacher wrote on the blackboard. Their questions, and their answers to the teacher's occasional questions, indicated curiosity and a willingness to think through the implications of ideas, strengths which might have been better served with a less lecture-driven format.

Instruction was in both Spanish and English. All blackboard notes were in English; all student questions were in Spanish. The teacher's presentation alternated between English and Spanish in varying patterns. She spoke Spanish an estimated 60 percent of the time and English the rest of the time. A paraprofessional was present but was not actively engaged.

The consultant also observed a bilingual global studies 2 class with 27 Spanish-speaking students, most of them in the ninth grade. The social studies department chairman wanted all students to gain knowledge of and respect for Chinese culture. To that end, he engaged the American Museum of Natural History's "Asia through the Arts" program in the spring semester to provide cultural enrichment activities. This included lessons in Chinese calligraphy, music, and the Dragon Dance. The class which the OREA consultant observed featured two musicians from this program.

Over a five-week period, the musicians trained the class to perform selected pieces on a set of Chinese percussion instruments. The musicians set up their instruments (cymbals, wood blocks, drums, and a gong) at the front of the class. The musicians addressed the class in English, pausing while the teacher translated into Spanish. The musicians were enthusiastic and well-prepared, but the process was awkward. Boys and girls alternated in small groups, performing under the direction of one of the musicians, while the other musician helped keep time on the cymbals. The department chairman said that the students had discovered to their surprise that Chinese rhythms had much in common with Latin music. Many of the

listeners, however, seemed bored by the repetitive drills of each group—the teacher needed to appeal for quiet several times. After another week of rehearsal, this class was to perform at a festival at the American Museum of Natural History.

Mathematics. The content area objective for mathematics was:

- As a result of participating in the program, 70 percent of students will achieve a passing grade of at least 65 on teacher-made or schoolwide final examinations in mathematics.

For passing rates, see Table 5 below.

TABLE 5

Mathematics Passing Rates, by Grade Level

Grade	Fall 1992		Spring 1993	
	Number of students for whom data were reported	Percent Passing	Number of students for whom data were reported	Percent Passing
9	44	90.9	49	67.3
10	64	68.8	62	66.1
11	55	74.5	51	84.3
12	45	82.2	31	83.9
Total	208	77.9	193	74.1

In each semester, more than 70 percent of the students achieved a passing grade in mathematics.

The project met its objective for mathematics, which it had partially met in the previous year.

Science. The content area objective for science was:

- As a result of participating in the program, 70 percent of the students will achieve a passing grade of 65 percent or higher on teacher-made or schoolwide examinations in science.

For passing rates, see Table 6 below.

TABLE 6

Science Passing Rates, by Grade Level

Grade	Fall 1992		Spring 1993	
	Number of students for whom data were reported	Percent Passing	Number of students for whom data were reported	Percent Passing
9	8	87.5	30	93.3
10	13	76.9	15	66.7
11	37	62.2	43	72.1
12	24	58.3	21	100.0
Total	82	65.9	109	82.6

More than 80 percent of the students for whom science grades were reported achieved passing grades in the spring semester, but fewer than the stipulated 70 percent received passing grades in the fall.

The project partially met its science objective, which it had fully met in the previous year.

Social Studies. The content area objective for social studies was:

- As a result of participating in the program, 70 percent of the LEP students will achieve a passing grade of at least 65 percent on teacher-made or schoolwide examinations in social studies.

For passing rates, see Table 7 below.

TABLE 7

Social Studies Passing Rates, by Grade Level

Grade	Fall 1992		Spring 1993	
	Number of students for whom data were reported	Percent Passing	Number of students for whom data were reported	Percent Passing
9	39	69.2	37	83.8
10	56	73.2	58	79.3
11	54	77.8	51	94.1
12	46	89.1	36	91.7
Total	195	77.4	182	86.8

In each semester, more than 75 percent of the students received a passing grade in social studies.

The project met its social studies objective, which it had met partially in the previous year.

Business Education. Seward Park High School offered a sequence of business-oriented courses corresponding to the project's original focus on career preparation. Although none of the business education teachers spoke Spanish, bilingual paraprofessionals assisted in project students' classes when possible.

The project proposed four objectives for business education. The first was:

- As a result of participating in the program, 70 percent of the students will achieve a passing grade of 70 percent or higher on teacher-made and/or schoolwide examinations in Keyboarding I, II.

For passing rates, see Table 8.

TABLE 8

Business Education Passing Rates:
Keyboarding

Grade	Fall 1992		Spring 1993	
	Number of students for whom data were reported	Percent Passing	Number of students for whom data were reported	Percent Passing
9	10	90.0	23	78.3
10	21	95.2	5	80.0
11	9	88.9	5	100.0
12	6	100.0	3	100.0
Total	46	93.5	36	83.3

At all grade levels, in both semesters, the percentage of students passing the keyboarding courses was at least 78 percent.

The project met its keyboarding objective, as in the previous year.

The second business education objective was:

- As a result of participating in the program, 70 percent of the students will achieve a passing grade of 70 percent or higher in Bilingual Occupational Education I, II.

Because only a few students wished to enroll in Occupational Education, the school cancelled the course.

The project did not meet its objective for occupational education, which it had met in the previous year.

The third business education objective was:

- As a result of participating in the program, 70 percent of the students will achieve a passing grade of 70 percent or higher in Computer & Business Technology on teacher-made final examinations.

See Table 9 for passing rates.

TABLE 9

Business Education Passing Rates:
Computer and Business Technology

Grade	Fall 1992		Spring 1993	
	Number of students for whom data were reported	Percent Passing	Number of students for whom data were reported	Percent Passing
9	1	100	1	100
10	7	85.7	6	100
11	8	100	3	100
12	5	100	2	100
Total	21	95.2	12	100

In the fall, the passing rate at each grade level was at least 85 percent. In the spring, all students passed.

The project met its computer and business technology objective, which it had partially met in the previous year.

The fourth business education objective was:

- As a result of participating in the program, 75 percent of the students will receive a passing grade of 75 in Jewelry on teacher-made final examinations.

The jewelry course was a one-semester course with a hands-on emphasis, taught by a monolingual English-speaking teacher. In the fall, one project student took the course and received a final grade of 80. In the spring, six students enrolled and received grades ranging from 90 to 96. The passing rate was, therefore, 100 percent in both semesters.

The project met its objective in jewelry-making, as in the previous year.

The project met three of its four objectives for business education. The fourth was no longer pertinent since the course to which it applied was dropped by the school.

FORMER PARTICIPANTS' PROGRESS IN ENGLISH LANGUAGE CLASSROOMS

Project Aprendizaje did not mainstream any participants in the year previous to that under review.

OVERALL EDUCATIONAL PROGRESS ACHIEVED THROUGH PROJECT

Cultural Activities

Project Aprendizaje organized a large Latin American festival which featured a variety of artistic performances. The project also took students to several cultural events and performances. These included an exhibition at the American Folk Art

Museum, a folklore exhibition at City College, and a performance of the Repertorio Español. In addition, twenty students accompanied two staff members to the State Association for Bilingual Education (SABE) annual conference in upstate New York.

Extracurricular Activities

For the year under review, the project clarified its extracurricular activities objective as follows:

- The project will organize and help conduct at least three extracurricular activities in which 50 or more project students participate.

As in previous years, project staff supervised the school's popular Latin American Club, which held four meetings with attendance ranging from 52 to 56 students. The project offered mathematically gifted students the opportunity of participate in an extracurricular correspondence school sponsored by Rutgers University. Twelve project students also participated in Arista's activities.

The project met its extracurricular activities objective, which OREA had been unable to evaluate in the previous year because of its vague wording.

Newsletters

- Two newsletters will be published describing the aims, goals, and implementation procedures of the program.

The project published two issues of *La Voz Latina*, a bilingual newsletter containing essays by project students as well as information about project activities.

The project met its newsletter objective, as in the previous year.

Grade Retention

Twenty-eight participating students (10.4 percent) were retained in grade. This represented a decrease from the previous year, when 49 project students (16.4 percent) were retained in grade. No objective was proposed in this area.

Dropout Prevention

Project Aprendizaje proposed the following dropout prevention objective:

- Program students will have a dropout rate no greater than non-program students.

The dropout rate for project students was 3.0 percent, much lower than the previous year's 7.0 percent and the schoolwide dropout rate of 9.6 percent.

Project Aprendizaje met its objective for dropout prevention, as in the previous year.

Suspension Rate

The project proposed one objective in this area:

- Students in the program will have a suspension rate no greater than that of mainstream students.

Four project students (1.5 percent) and 64 mainstream students (2.2 percent) were suspended in the year under review. In the previous year, one project student (0.3 percent) was suspended.

The project met its suspension rate objective, as in the previous year.

Attendance

The project had one attendance objective:

- By June 30, 1993, students in the program will have a rate of attendance at least equal to that of the mainstream students.

The attendance rate for the project was 90.6 percent, based on 261 students, while the schoolwide rate was 82.3 percent. Project students' attendance was significantly higher ($p<.05$) than that of mainstream students, although slightly lower than the previous year's 91.4 percent.

The project met its attendance objective, as in the previous year.

Placement in Gifted and Talented Programs

As in the previous year, no students were placed in formal programs for the gifted and talented. Twenty-one project students took advanced placement Spanish, however. In addition, staff encouraged mathematically gifted students to participate in the American Mathematics Correspondence School, based at Rutgers University, as an extracurricular activity. Participation in this program declined from the previous year, however, because several students in the senior class needed to devote more time to applying for jobs and/or advanced schools. About 12 project students participated in a variety of enrichment and service activities as members of Arista. Two students earned fellowships to the Annabelle Gonzalez Dance Theater Company. In all, the project reported 28 students (10.4 percent) as involved in advanced or enrichment activities.

Guidance

The project proposed two objectives for counseling:

- All graduating students will meet with the career counselor for advice at least four times during the school year or as many times as necessary to help the student.
- Students with special needs (e.g., academic, linguistic, psychological, economic) will meet the guidance counselor at least once monthly.

Graduating students either met individually with the career counselor or participated at least once a month in small group workshops on self-knowledge and the job market. A student teacher, under the supervision of the career counselor, visited a class each week in the fall semester to discuss career options. The project also used a computerized service that matched student interests with career opportunities in the New York metropolitan area.

The guidance counselor estimated that 40 project students were regular monthly visitors to her office. A variety of needs and concerns led them to seek counseling; when the problem was family-related, a parent often came with them.

The project met both guidance objectives, as in the previous year.

Enrollment in Postsecondary Education Institutions

Twenty-seven (52 percent) of the graduating seniors indicated that they would be enrolling in postsecondary educational institutions upon graduation. In the previous year, although it was not reported in time to be included in OREA's 1991-92 evaluation, 16 graduating project students (37 percent) went on to college. Financial difficulties and family responsibilities made it difficult for many of the other students to choose any path but full-time employment after high school.

Case History

Soon after his immigration from the Dominican Republic, Guillermo (a pseudonym) entered ninth grade at Seward Park High School in the fall of 1989. He was placed in an intermediate E.S.L. class and, like all ninth grade project students, took his content area courses in Spanish. He felt at home in the project office, spending most of his free periods there in order to give and receive informal tutoring.

He maintained an average in the low 90's. The guidance counselor referred to him as "my philosopher" on account of Guillermo's tendency to analyze problems extensively before making decisions.

Steady progress in English allowed him to enter a mainstream English communication arts class in the fall of his senior year. In the same semester, he took the U.S. History Regents Examination and achieved a score of 90 percent, the highest in the school.

Unfortunately, the needs of his family will probably set a limit to Guillermo's future education. In order to help support his mother, who has other dependents, Guillermo plans to start work after attending a two-year community college.

STAFF DEVELOPMENT OUTCOMES

The project proposed three objectives for staff development.

- By June 30, 1993, 100 percent of Project Aprendizaje personnel will have participated in staff development activities, in-service training workshops, and departmental meetings offered by the Project Director.

All Title VII staff attended monthly meetings of the foreign language/E.S.L. department. One of the educational assistants attended a workshop on children's literature, and three attended the school's presentation on teacher certification.

The project met its objective for in-service staff development, as in the previous year.

- By June 30, 1993, all the educational assistants will have completed a minimum of nine credits towards a bachelor's degree or training in a field relating to bilingual education.

One educational assistant completed three college credits and another eight credits. Child care responsibilities prevented two others from taking college courses in the year under review.

The project did not meet its objective for educational assistants' completion of college courses, which it had not met in the previous year, either.

- By June 30, 1993, 100 percent of the professional staff will have attended a regional or national conference, meetings, seminars, colloquiums, and workshops in the field of bilingual education.

The project director attended two conferences on Spanish literature. She also attended the New York State Association for Bilingual Education (SABE) conference together with the bilingual curriculum resource teacher.

The project met its objective for professional staff's participation in conferences, as in the previous year.

PARENTAL INVOLVEMENT OUTCOMES

The project proposed three objectives for parental involvement.

- The Bilingual Parent Advisory Council (BPAC) will have at least four meetings during the school year with an attendance of at least 50 percent of the BPAC members.

The Bilingual Parent Advisory Council met four times during the school year. At each meeting, there were at least six members (67 percent) in attendance.

The project met its BPAC objective, which it had not met in the previous year.

- There will be an increase in the number of parents attending parent-teacher day/night conferences.

The objective does not specify the time span across which the increase is to be measured.

The fall and spring parent-teacher conferences were attended by 55 and 60 project parents respectively. The previous year's attendance at the two conferences had been 71 and 56. That year's fall semester count, however, included 16 parents who had visited the school after the day scheduled for the conference and had met with the guidance counselor only. Therefore, parental attendance can be said to have increased from one year to the next, and it definitely increased from one semester to the next.

The project met its objective for an increase in attendance at parent-teacher conferences, as it had in the previous year.

- Students' parents will be contacted by telephone, mail, newsletters, or home visits by the family assistant to inform them of their children's program activities.

In addition to sending parents two issues of the newsletter already mentioned, the project made diligent efforts to keep in touch with parents. Staff contacted parents of students who were repeatedly absent or failed a course. By means of an automatic telephone messaging system, staff issued reminders of upcoming project activities to all families that had telephones.

The project met its parental contact objective, as it had in the previous year.

IV. SUMMARY AND CONCLUSIONS

ACHIEVEMENT OF OBJECTIVES

The project met its objectives for E.S.L., N.L.A., guidance, attendance, suspension rate, dropout prevention, extracurricular activities, and newsletters. It met its objectives for business education, although one objective could not be measured since the course it covered was cancelled by the school. The project met its content area objectives almost completely, falling short only in one subject in one semester. It also met two of its three staff development objectives, failing to meet the objective for continuing education of paraprofessionals.

Participating students in Project Aprendizaje showed academic progress. Of the 217 participating students in grades nine through eleven, 189 (87 percent) were promoted to the next grade. The students showed gains in N.L.A. as indicated by the ELE and in the content areas as indicated by final course grades. The project met its objective for passing rates in E.S.L. courses, and, in addition, the students showed a mean gain in English as measured by the LAB.

Project services not only benefited the students academically but also appear to have fostered positive attitudes toward school. The attendance rate of participating students was appreciably higher, and the dropout and suspension rates were much lower, than those of the Seward Park High School mainstream population.

MOST AND LEAST EFFECTIVE COMPONENTS

The project's broad success in meeting its instructional objectives is indicative of effective cooperation with school staff and the creation of a positive climate for

learning. The project's collaboration with a cross-cultural program sponsored by the American Museum of Natural History was imaginative and professionally implemented. The cultural events sponsored by the project itself, particularly the Latin American festival, were well received in the local community and helped build relationships with parents.

On the other hand, the scope of career education activities seemed limited for a project which had proposed to focus on career preparation. Although project staff reported that one student had obtained a job with the telephone company as a result of a career workshop, this area seems to have been the least effective component of the program.

Since this was the project's final year, no recommendations for project improvement are offered by OREA.

APPENDIX A

INSTRUCTIONAL MATERIALS

E.S.L.

Passage to E.S.L. Literacy	D. Longfield	Delta System	1981
English for a Changing World, books 1-5	C. Banks	Scott, Foresman	1977
Turning Points, books 1-3	Iantorno & Papa	Addison-Wesley	1987
Great American Stories I, II	C. Draper	Prentice Hall	1985
Write from the Start	Davidson & Blot	Newbury House	1984
Lifelines	S. Molinsky	Prentice Hall	1983
Gallery	Fassman & Tavarez	Oxford	1982
Write Now	L. Markstein	Regents Publishing	1984
Ready to Write	Blanchard & Root	Longman	1984
At the Door	McKay & Petitt	Prentice Hall	1984
Skill Sharpeners	DeFilippo & Skidmore	Addison-Wesley	1984

N.L.A.

Español 5	J. Legorburu	Ediciones SM	1989
Leyendas latinoamericanas	Barlow & Genevese	National Textbook	1975
El Español al día	Turk & Allen	D. C. Heath	1973
Lecturas modernas hispanoamericanas	Barlow & Genevese	National Textbook	
Galería hispánica	Lado, Albini, Peña *et al.*	McGraw-Hill	
Caleidoscopio de las Américas	Martin, Merrill, Valencia	Ginn & Co.	1971
Vivir hoy	Duran & Duran	Harcourt, Brace	1973
Del solar hispánico	Del Rio	Holt, Rinehart	1957
AP Spanish	Diaz, Leichter-Prieto, *et al.*	Longman	1989

Mathematics

Repaso matemático	E. Stein	Allyn & Bacon	1971
Integrated Mathematics	Dressler & Keenan	Amsco	1980
Mathematics: A Topical Approach	Klutch	Charles E. Merrill	1979
Algebra moderna	Dolciani, Berman, Freilich	Houghton Mifflin	1962

Science

Biología	Alexander *et al.*	Silver, Burdett, & Ginn	1987
La materia y la energía	Heimler & Price	Charles E. Merrill	1985
Biology	Schraer & Stoltze	Allyn & Bacon	1986
Physical Science	Appenbrink *et al.*	Prentice Hall	1988

Social Studies

America: the Glorious Republic	H. Graff	Houghton Mifflin	1988
Antigua continente	A. Martinez	Editorial Norma	1987
Comprende tu mundo	Killoran & Zimmer	Jarrett	1991
Consent of the Governed	Lewinski, Capurro, et al.	Scott, Foresman	1987

APPENDIX B

CLASS SCHEDULES

The day of a student at Seward Park High School was divided into nine 42-minute periods. Each student's schedule was the same from Monday to Friday. Below are the spring semester daily schedules of four students in Project Aprendizaje:

	Grade 9	Grade 10	Grade 11	Grade 12
I.	Fundamental Math	A.P. Spanish	English 5 (mainst.)	A.P. Spanish
II.	Business Typing	General Science 2	Gym	Economics
III.	Global Studies 2	Sequential Math 3	Sequential Math 3	Sequential Math 3
IV.	Gym: Aerobics 1	Lunch	Lunch	Biology 2
V.	Spanish 4	U.S. Government	U.S. Government	Biology Lab
VI.	Lunch	E.S.L. 5	A.P. Spanish	Study hall
VII.	E.S.L. 4	Gym: Swimming	Global Studies 2	English 8 (mainst.)
VIII.	E.S.L. 4	English 5 (mainst.)	E.S.L. 5	English 8 (mainst.)
IX.	Reading: RCA 4	Global Studies 4	--	Gym